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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHARLES, DEBRA F	
ART UNIT	**PAPER NUMBER**
3628	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/536,258	GASTINEAU ET AL.	
	Examiner	Art Unit	
	Debra F. Charles	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *September 24, 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09/24/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. Claims 1, 8, 15, and 20 have been amended.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 8 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. It is not clear how the entity impacts the computers or the computer program, the impact of the invention is not apparent since the claims start with the receiving

point, and it is not clear what the output is from the invention. The examiner recommends more detail be included to fully delineate the steps of the invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 6-11, 13-14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings et al.(U.S.PAT. 60606615 B1), and Kiwoong Cheong "A Test of the Multi-Factor Asset Pricing Model with the ASA-NBER Macroeconomic Forecasts" dissertation, State University of New York at Albany, 1988.

Claims 1 and 8: Jennings et al. disclose a method and computer program product residing on a computer readable medium for hedging investment risk (Abstract, col. 8, lines 5-55, col. 9, line 60-col. 10, line 15, col. 34, lines 25-67), comprising:

wherein one or more computers programmed with factor analysis software determines the factor information(col. 9, line 1-col. 10, line 15),

Using one or more computers with the factor information as an input(col. 9, line 1-col. 10, line 15),

wherein the specific securities in the actively managed exchange traded fund are unknown to an entity who uses the hedging portfolio to hedge against an investment (col. 11, line 65 – col. 13, line 15).

Jennings et al. disclose(s) the claimed invention except receiving or determining factor information about the actively managed exchange traded fund holdings, which measures sensitivities of the fund holdings to factors that affect the value of the fund holdings; and to select a portfolio of financial instruments to produce a hedging portfolio with substantially the same sensitivities to the factors that affect the value of the fund holdings. However, in chapter 1,2, and 3 especially pages 35-40 thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Claims 2 and 9: Jennings et al. disclose hedging portfolio tracks the price of the fund(col. 12, line 45-col. 13, line 15).

Claims 3 and 10: Jennings et al. disclose using the hedging portfolio to hedge a position taken in the exchange traded fund(col. 30, line 60-col. 32, line 15).

Claims 4 and 11: Jennings et al. disclose(s) the claimed invention except applying factor analysis to the portfolio of the exchange traded fund to determine the sensitivity of the fund to the factors.

However, in chapter 1,2, and 3 especially pages 35-40 thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Claims 6 and 13: Jennings et al. disclose(s) the claimed invention except the factors include economic activity, inflation rates or other factors that are related to measures of economic activity. However, in chapter 1,2, and 3 especially pages 35-40 and chapter 4, thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods and also macroeconomic and microeconomic models. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Claims 7 and 14: Jennings et al. disclose(s) the claimed invention except selecting a group of securities, and constructing the hedging portfolio based upon weightings and selections of securities from the group of securities. However, in page 29, thereof, Kiwoong Cheong disclose(s) factor analysis and groupings of securities, along with securities market

value weighing It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Re Claim 20: Jennings et al. disclose a method of calculating an intra-day value proxy for an actively managed exchange traded fund(col. 12, line 45-col. 13, line 15), comprising:

one or more computers programmed with factor analysis software determine the factor information(col. 9, line 1-col. 10, line 15),

Using one or more computers with the factor information as an input(col. 9, line 1-col. 10, line 15),

applying current prices to the hedging portfolio to determine the intra-day value proxy value for the exchange traded fund(col. 12, line 45-col. 13, line 15).

Jennings et al. disclose(s) the claimed invention except producing a hedging portfolio to track an actively managed exchange traded fund by receiving or determining factor information about the fund holdings, which measures sensitivities of the fund holdings to factors that affect the price of the fund, to select a portfolio of financial instruments to produce a hedging portfolio with substantially the same sensitivities to the factors that affect the value of the fund. However, in chapter 1,2, and 3 especially pages 35-40 thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

6. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings et al., Kiwoong Cheong and Meyers et al.

Claim 15: Jennings et al. disclose a computer system for producing a hedging portfolio for hedging investment risk in actively managed exchange traded funds(Abstract, col. 8, lines 5-55, col. 9, line 60-col. 10, line 15, col. 34, lines 25-67), comprising:

a computer storage medium storing a computer program product(Abstract, col. 8, lines 5-55, col. 9, line 60-col. 10, line 15, col. 34, lines 25-67).

Jennings et al. disclose(s) the claimed invention except receiving or determining factor information about the actively managed exchange traded fund holdings, which measures sensitivities of the fund holdings to factors that affect the value of the fund holdings; and to select a portfolio of financial instruments to produce a hedging portfolio with substantially the same sensitivities to the factors that affect the value of the fund holdings. However, in chapter 1,2, and 3 especially pages 35-40 thereof, Kiwoong

Cheong disclose(s) factor analysis as it applies to predication methods. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Jennings et al. and Kiwoong Cheong disclose(s) the claimed invention except a trusted computer system. However, in Abstract, cols. 1-26 thereof, Meyers et al. disclose(s) a trusted secure computer system. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. and Kiwoong Cheong based on the teachings of Meyers et al. The motivation to combine these references is both Jennings et al. easily fit onto trusted secure computer systems which are widely used for financial applications.

Re Claim 16: Jennings et al. disclose use the hedging portfolio to hedge a position taken in the exchange traded fund(col. 30, line 60-col. 32, line 15).

Re Claim 17: Jennings et al. and Meyers et al. disclose(s) the claimed invention except apply factor analysis to the exchange traded fund to determine the sensitivity of the fund holdings to the factors. However, in chapter 1,2, and 3 especially pages 35-40 thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Re Claim 18: Jennings et al. and Meyers et al. disclose(s) the claimed invention except the factors include economic activity, inflation rates or other factors that are related to measures of economic activity. However, in chapter 1,2, and 3 especially pages 35-40 and chapter 4, thereof, Kiwoong Cheong disclose(s) factor analysis as it applies to predication methods and also macroeconomic and microeconomic models. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to

combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

Claim 19: Jennings et al. and Meyers et al. disclose(s) the claimed invention except select a group of securities, and construct the hedging portfolio based upon weightings of and selections from the group of securities. However, in page 29, thereof, Kiwoong Cheong disclose(s) factor analysis and groupings of securities, along with securities market value weighing It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. based on the teachings of Kiwoong Cheong. The motivation to combine these references is to effectively and efficiently build a model portfolio for getting more accurate estimates of risk premia.

7. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings et al. and Kiwoong Cheong as applied to claims 3 and 11 above, and further in view of Meyers et al.

Claims 5 and 12: Jennings et al. and Kiwoong Cheong disclose(s) the claimed invention except a trusted computer system. However, in Abstract, cols. 1-26 thereof, Meyers et al. disclose(s) a trusted secure computer system. It would be obvious to one of ordinary skill in the art to modify the invention of Jennings et al. and Kiwoong Cheong based on the teachings of Meyers et al. The motivation to combine these references is both Jennings et al. and Kiwoong Cheong easily fit onto trusted secure computer systems which are widely used for financial applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra F. Charles whose telephone number is (703) 305-4718. The examiner can normally be reached on 9-5 Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (703) 308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINER
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Debra F. Charles

Examiner

Art Unit 3628

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